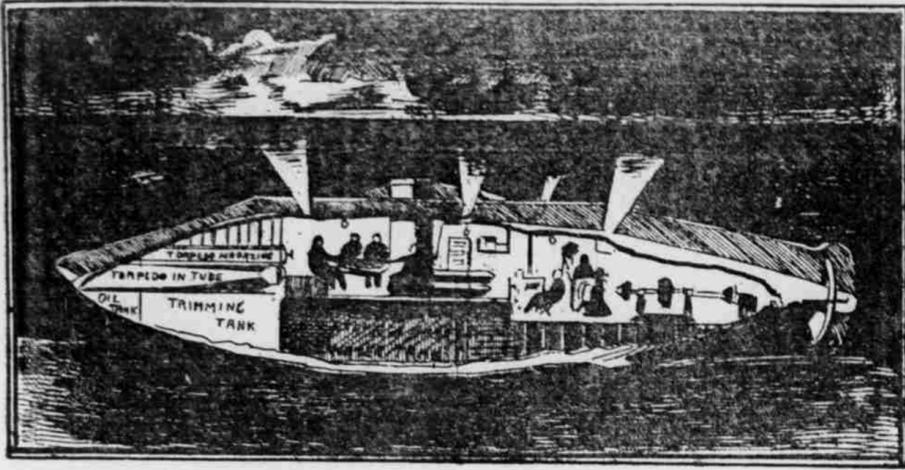


**TORPEDO BOAT, FULTON, REMAINS UNDER WATER FOR A PERIOD OF FIFTEEN HOURS.**



**HOLLAND SUBMARINE BOAT AS IT APPEARS UNDER WATER.**

ONE of the most remarkable tests in the history of the United States navy was successfully made in Long Island sound recently. For fifteen hours the Holland submarine boat, Fulton, lay on the bottom of the sound with at least eight feet of water washing over her decks. Within the steel shell were eight men, including Rear Admiral John Lowe and Captain Frank T. Cable. The men suffered no inconveniences whatever. They slept, ate, read and played cards. They knew nothing of a fierce storm which was raging over them, wrecking vessels and destroying property.

The test demonstrated that the vessel could remain under water for weeks as well as hours, so far as the question of pure air was concerned. None of the air contained in the four tanks was used, and yet when the boat arose the air in it was pure and wholesome. The question of the air supply being settled, the time which the vessel can remain submerged depends entirely upon the amount of food and fuel which it can carry. The boat was not damaged in any way on account of resting on the bottom and was safe from the winds and waves above. This proves that such a boat in case of a storm at sea could quickly sink from danger. Should a hostile boat threaten it the little wonder could disappear beneath the waves and if necessary remain out of sight and danger for days.

The marvelous boat is of the same style as the original Holland submarine vessel, but great improvements have been made in the apparatus which controls it. Experts are of the opinion that the boat is now the highest type of submarine craft. Its speed is from 7 to 9 knots an hour. It is the belief that two such boats could successfully guard any harbor or destroy a hostile fleet. It is probable that in the near future such boats will form an important, if not the most important, part of our navy, and may be the cause of revolutionizing the naval architecture of the world.

**A FAMILY MATTER.**

She sewed a button on my coat, I watched the fingers nimble, Sometimes I held her spool of thread, And sometimes held her thimble, "I'm glad to do it, since you're far From sister and from mother, 'Tis such a thing," she said, and smiled, "As I'd do for my brother."

The fair head bent so close to me My heart was wildly beating; She seemed to feel my gaze, looked up, And then our glances meeting, She flushed a ruddy, rosy red, And I, I bent and kissed her, "Tis such a thing," I murmured low, "As I'd do for my sister."  
—Brooklyn Life.

**Forty-six Minutes with Death**

THE strike at the "Foundry," starting from comparatively small grievances, had—thanks to the influence of a few of the leaders—reached a state where satisfactory settlement seemed impossible. The men had expected to be out a week, or ten days at the most, but nearly two



**HE STROVE TO SHAKE HIMSELF.**

months had elapsed, and their position was almost desperate. Several deputations had waited on old Mr. Vice, the proprietor, but had been invariably referred back to the manager, with the understanding that he had full authority to deal with them.

The manager, Shotwell, a young man of intelligent sympathies, from the first had been willing, even eager, to discuss the men's grievances and help them to an understanding. But when he found that the leaders, to whom the men had intrusted their cause, not only were disposed to take advantage of his justice, but were seeking their own ends, at the expense of the men, he suddenly changed his attitude and refused to listen to any proposals other than absolute surrender. He gave the three leaders to understand in the plainest language that under no consideration would he tolerate their presence in the shops again.

The result of this understanding and the contemptuous way in which the manager had expressed his opinion of the strikers and their scheming roused these men from sullen spite to hatred. They could not keep the men back or get back themselves unless—well, unless Shotwell changed his mind, and they knew him too well to hope for that.

Shotwell's obstinacy had surprised even old Mr. Vice, who had known him from boyhood—known him so well, in fact, that he had sanctioned the young man's engagement to Dorothy, his daughter. It was possibly the thought of a future partnership that made him so determined to stand to his guns now and show the old man and his sweet-

heart that he was capable of holding the reins.

Even Dorothy's lover hardly understood her. She had strange ideas of "soul communion" that made the matter-of-fact young man gasp; and she had an uncanny knack of demonstrating the proof of her beliefs by reading his unspoken thoughts with an accuracy that, to a less healthy, wholesome young fellow, might have been embarrassing. But withal she was so womanly and tender, and her fancies so pretty, that gradually he grew used to them, and found himself often lingering over them and almost wishing they could be true.

To one of these fancies he had readily yielded; each evening both sat where they might be in silence for a little time and let their thoughts go out freely to each other. "Soul talks," Dorothy called them; and whatever they were, the result was that his love for the girl grew more tender, and he knew that in some subtle manner he was coming to understand her better and better each day. These times had been inexpressibly dear to him of late. They were his moments of absolute rest from the worry of the strike, and he always felt his brain refreshed, and afterward was better able to cope with his growing difficulties.

The pulse of the strike was growing feverish, and night after night Shotwell had slept at the office, fearing some kind of an attack on the premises. By the end of the week worry and lack of sleep had told heavily upon him, and as he sat smoking in the mysterious shadows he determined that this must be his last night alone; he would get a watchman to aid him. His thoughts grew vague and mixed; his pipe fell to the floor and made him jump, then his eyes closed for a moment, opened sluggishly, dropped again and he was fast asleep.

With a start and a fearful sense of oppression he awoke, struggling wildly in his chair—tried to cry out, and realized that he was tied down. A cloth was wound tightly over his mouth, while the room was filled with a subtle, sickly odor of chloroform. He heard a sneering laugh behind his chair, and—"Well, yer took a purty good nap that time, didn't yer?" There was an answering growl from another throat, and the two men came round in front, both muffled in heavy coats, and pieces of cloth covering the upper half of their faces. One of them carried a small black box somewhat gingerly to the desk and sat it down in front of Shotwell. He turned a little brass key in it and hidden machinery began to tick-tack, tick-tack, like a clock. He twisted the box around and Shotwell saw a small dial, with the hands pointing to 9:50 o'clock. One of the men attached one end of a string to a lever on the box, and with the greatest precaution tied the other end to Arthur's left wrist. Now, see here, Mr. Shotwell, yer've got just forty-six minutes, and then that thing goes off, and God have mercy on four souls. If ye should want the thing to go quicker just struggle hard, and if ye manage to pull either of them strings, well, I guess it'll oblige ye."

"Now, Bill, we've got no time to waste. Here's the keys; ye go for the safe and I'll fix the desk."

Inside of fifteen minutes Shotwell's guests had gone, leaving little trace of their visit except a faint odor of chloroform, and that strange-looking black box, with its monotonous tick-tack, tick-tack. The whole thing had happened so suddenly, and his brain was so heavy with the drug, that the men were gone before he fully realized the horror of his position. As it dawned on him he could not believe it was true; it was some terrible nightmare. He strove to shake himself, but the tightening of the strings on his wrists and a half jar in the tones of that ceaseless tick-tack brought him back to his senses with a chill of horror. He glared terror-stricken at the little clock that was

ticking off the moments of his life—a second each time. A few more minutes and then—he broke out into a cold sweat; an unmanly fear of this unknown, cruel thing crept over him, and for a while he sat, huddled in abject terror; then slowly the soul of the man steadied itself; he closed his eyes to pray, and the word that came was "Dorothy." With a fierce mental effort he pulled together his shaken faculties for her sake. For her he would die like a man. Perhaps she would know he had been no coward.

Tick-tack, tick-tack, twenty minutes past 10. Ah! it was time to sit and talk to "Dorrie." Well, he would do it—would give her those last twenty minutes. And so he sat on, his face drawn and ghastly, but his courage firm—sat and bade a long good-by to the girl he loved; thought strong, manly thoughts to her, that kept fear from his heart. But while his inmost self talked with "Dorrie" his flesh grew gray and pinched, the lonely silence broken only by the steady ticking of his clock of doom.

Dorothy that night sat reading; then later fell to wondering of Arthur alone in that great building, and at the thought of his loneliness all her heart went out to him; and perhaps some of her soul, for her body fell asleep. Then she, too, woke with a start—a start of perplexity and fear; fear for Arthur—what was it? She passed her hand over her forehead, bewildered. What was it—why could she not remember? Then the ticking of the clock on the mantel caught her ear—caught it strangely, and she listened, breathless, trembling; tick-tack, tick-tack—what did it mean? Then slowly and softly a solemn voice fell on her inner ear: "Good-by, Dorrie; good-by, darling."

"Ah!" she rose to her full height—was rigid there for an instant, then quietly, "Yes, I know; I understand." She walked quietly to her father's room, took his keys, and, taking her hat and coat, slipped unseen out into the night. Tick-tack, tick-tack, eight minutes more.

"Eight minutes; eight years; God! Can I wait? One brave spring now would end the torture, and—no, no, for Dorrie's sake, for the honor of love, I'll live my life out to the last bitter second." Shotwell closed his eyes a few moments, then opening them, saw a face in the doorway gazing at him; to him it seemed the soul of Dorrie, come to say "good-by."

He was not afraid, hardly awed; it was not real; dying men's eyes are sometimes strangely clear; he noticed the hat, the coat; the face drawn with fearful anguish—souls did not look like that—it was Dorrie herself. A moment of wild joy was swallowed up in a still greater horror—"Dorrie!"—here, with that thing—Oh! God; this was worst of all—but her quick hands touched him, deftly untying first the handkerchief that gagged him, then delicately slipping those fearful strings from his wrists.

"How long, Arthur?" she whispered. He glanced desperately at the clock. "Two minutes; don't stop to untie me; water, quick! There's a bucket; fill it at the tap; it's our only chance."

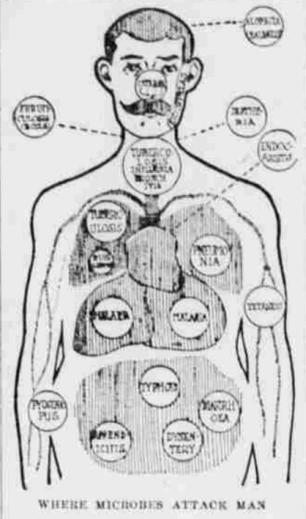
She comprehended instantly. Oh, how slow the water ran! She walked swiftly to the desk, took the box in her hands, and carried it, ticking, to the bucket; placed it in and held it, trembling, as the water swallowed it, until there was a little rasping jar in the ticking. Shotwell drew one deep, long breath as he stooped over the girl and waited for what never came. One, two, three minutes passed; then, with a breath of half fearful relief, he looked down at Dorrie. She was fast asleep, nestled in his arms and breathing peacefully.

He waked her with a kiss. She stared at him in sleepy surprise. "Why, Arthur! Where am I? What is it, dear? How white you look; and see, the water's running all over the floor; you careless boy—I—oh, Arthur, I—take me home."—Milwaukee Wisconsin.

**WHERE THE DEADLY MICROBES ATTACK MAN.**

IN general half of the deaths in the human family are known to be caused by microscopic organisms. Just how many other deaths may be traced to the same germ source is not known. They may be many, however. Almost every day new portions of the body are found to be infested with the tubercle bacilli, and that this germ, so long known, has habits undreamed of a few years ago indicates the possibilities of growth in the whole theory of germs.

The germs of all disease, broadly, are low animal or vegetable organisms. They may be cultivated by artificial means, just as plants are grown from seeds. As to the number of these germs, it is a problem, but for the most part the several hundred germs listed are innocuous. Those of pathological significance are pretty well determined; many of the others, so far as known, are harmless.



**WHERE MICROBES ATTACK MAN.**

Some germs are homebodies, and never care to wander or to roam. If an unkind fate shifts them into unaccustomed, even though comfortable surroundings, they pine away, refuse nourishment and die.

Take the bovine tuberculosis microbe. Dr. Koch discovered and proved to his own satisfaction that this little animal will perish in the midst of plenty if violently taken from its birthplace and transferred to the human body. Yet such action on the part of the transplanted animalcule can be but a senseless whim, for the overwhelming majority of germs are agreed that human beings are by far the most aristocratic dwellings on the list.

By actual count some one has placed the number of microbes infesting the mouth and teeth at 159. He might

have made it 160, but it speaks volumes for his accuracy that he did not. Most of these germs are harmless, but in the mouth of a healthy person may be found the microbes of dangerous diseases.

Oddly enough, few germs are found in the stomach. An uncertain number—perhaps fifty or more—occupy the alimentary canal and digestive apparatus of the individual. The skin at all times is the haven of microbes of all kinds. While the mucous membranes are most always harboring germs, there are fewest in the eye for the reason that it is washed with the salt tear secretions. All through the air passages are disease germs, depending upon the environment and exposure of the person. Germs of diphtheria, influenza, pneumonia, and even tuberculosis, are found in the throat and bronchial tubes.

The liver and kidneys harbor germs of tuberculosis, malaria, and typhoid fever. And yet the person in whose system these are found may never develop one of the diseases.

In the arm may be found the pyogenic organisms which produce pus and suppuration. These germs also are found in the heart.

Malarial germs are in the blood for the most part, but they are concentrated particularly in the spleen. Also, they are found in the liver.

Endocarditis germs are found in the heart.

Furunculosis, or boils, is the effect of germs, and the seat of these are most commonly about the neck.

The germ of erysipelas may be found in the side of the face and neck.

The germ of alopecia, or baldness, finds lodgment in the scalp.

That the air everywhere is swarming with these minute vegetable organisms, that the body is infested with them, and yet that thousands of people die every year from old age are seeming anomalies.

The worst enemy of the microbe in the machinery of the system is the white corpuscle in the blood. To be certain taking hold in the system, the microbe must get somewhere that the white corpuscle cannot go. Thus in some case containing abnormal secretions from the blood and tissues, the micro-organism finds lodgment and food, while the white corpuscle in the same surrounding dies.

The one condition in nature which no microbe can stand is sunlight. With some of them minutes will suffice to kill; with others days are necessary; but sooner or later all the known organisms fall victims to sunshine.

As to microbes and diseases, as cause and effect, there are some further possibilities for the microscopist. It is not known if that dread disease, cancer, is of microbe origin. The microbe of rheumatism has not been discovered, providing there is one. Nobody has isolated the possible germ of hydrophobia. But the field is open.

**BEDINI'S DARING ACT.**

**Catches Turnip Thrown from a Chicago Skyscraper on a Fork.**

Chicago people were treated to an astonishingly daring feat the other day, when Johan Bedini, of London, England, holding an ordinary carving fork in his mouth, caught a turnip hurled from the nineteenth floor of the Masonic Temple. An immense crowd watched the performance, and the cars were blocked for some time. Bedini appeared in a headress like that of a cannibal king, with a spike on top, and



**JOHN BEDINI'S PERFORMANCE.**

placed the fork, a wooden-handled affair about a foot long, between his teeth. The first turnip went wild and the second struck the spike on Bedini's forehead, stunning him severely. He rallied quickly and caught the third turnip squarely on the tines of the fork. He took the terrific shock unflinchingly, and though his lips bled freely and he went tumbling backward, he clung to the fork with set teeth. The Londoner was given a tremendous ovation by the throng. He began his peculiar calling as a juggler, and used to catch vegetables thrown from the galleries of theaters. He says he has caught a turnip thrown from the Brighton Tower in England, a distance of 500 feet, and he intends to catch one dropped from the Paris Eiffel tower.

**Magic Patch.**

A hot water geyser, in the upper geyser basin of Yellowstone Park, has been turned to practical use by building a lighthouse over it and thereby enabling several crops to be raised yearly, where otherwise such a thing would be impossible because of the almost daily frosts in this region. The structure was built by W. P. Howe. It is roughly made, and is 25 by 50 feet. A stream of hot water flows from a five-inch hole in the southern end of the building, passing out the other end. The temperature of the water lacks only eight degrees of the boiling point, and the

house is kept at a tropical heat constantly.

The rich soil, the sun's light and the condensation of steam from the hot water make an ideal combination for the growth of vegetation. Lettuce, it is said, comes up from the dry seed in two days, and good-sized heads of lettuce were gathered in from 15 to 18 days after planting. In 28 days a head of lettuce measured 22 inches across, and the condensation of the steam would even break down the larger leaves with the weight of water upon them. Cucumber vines grow from 25 to 35 feet in length in less than 60 days without being watered, except for the moisture in the air. On some of the cucumber vines five full-sized cucumbers were gathered from a single joint. Three pails of water have been sufficient for watering the plants in the greenhouse on even the hottest day.—Scientific American.

**Brother Dickey on Poverty.**

"Poverty," said Brother Dickey, "bez been a great blessin' ter me an' mine. I never had money 'nuff in all my life ter make me set up in hod en ax myself. How long fo' daylight? I never had no money in de bank, en never felled down en broke my neck tryin' ter ketch de cashier w'en he lef word dat he was takin' exercise for his heft, en I never had one dollar in a railroad fer de receiver ter be thankful fer what he wuz 'bout ter receive. Rich men is ez necessary ez taxes, en des 'bout ez popular, sometimes; but dey got ez troubles dan what I got. Dey all hez dese highfalutin' diseases what no mens can pernoince, en no matter how much money dey gives de church, de preacher's private opinion is dey ain't ez fur fr'm hell ez next month is f'm Chris'mus! But de po' mens pull throo' somehow; en w'en dey gives up de ghost hit's allus wid some good, ol-fashion' complaint like de measels, or de brokebone fever, or de seven-year eetch, en de rub-down rheumatism. De patch is on dey britches, but de peace is in dey min'!"—Atlanta Constitution.

**His Theory.**

"I can't see," said Mr. Meeckton's wife, "how any man can persuade himself to be a mormon."

"Well," answered her husband, thoughtfully, maybe some people are such moral cowards that they want to get more members into a family debate and so shirk their half of an argument."—Washington Star.

**By Chance.**

Olive—"Marrage is so uncertain. A girl has to take her chances." May—"Chances! Goodness me, some girls don't even get one chance."—Philadelphia Bulletin.

After a man reaches the age of 30 he never takes much stock in the theory that the good die young.



"Who is the hero of the play?" "I can't tell you his name, but he's an angel."

"Is she a polite girl?" "Not at all. She finds it impossible to break herself of the habit of telling the truth."

He—Now, don't you bother to help me on with my coat. She—It's no bother. It's a pleasure.—Town Topics.

Heredity. "Wot you doin', chile?" "Nothin', mammy. My, but you is gittin' like yosh father."—Baltimore World.

Blobs—"Wigwag must be making an awful lot of money." Blobs—"I should say he is. I actually believe he is making more than his wife can spend."

"I believe Mrs. Headlock would rather quarrel with her husband than with anybody else." "Decidedly! Force always seeks the line of least resistance."

Doctor—Did you take my prescription, ma'am? Patient—Yes; but, say, doctor, paper's awful hard to get down, an' it didn't seem to do me no good.—Chicago News.

Employer—And how long were you in your last place, my good man? James (just out of Folsom penitentiary)—Ten years, sir, and I never had a single evening out.—EX.

"Why, gentlemen!" cried the after-dinner speaker, tragically, "what would this nation be without the ladies?" "Stagnation, of course," murmured the Cheerful Idiot.—Judge.

"Didn't you go away at all, Mrs. Dash?" "No; Mr. Dash said he was so well fixed now that we could afford to stay at home if we wanted to—so we did."—Detroit Free Press.

He—I shall never marry until I meet a woman who is my direct opposite. She (encouragingly)—Well, Mr. Duffer, there are plenty of bright, intelligent girls in the neighborhood.

A Guarantee and a Promise. "Do you guarantee this goods not to fade?" "Absolutely! And if it does we will sell you new goods to match the changed color."—Indianapolis News.

Not His Fault. "Do you realize," said the economist, "that there is a heavy surplus in the United States Treasury?" "Well," answered Senator Sorghum, "it ain't my fault."—Washington Star.

Newlywed—"Why don't you take a wife?" Bachelor—"My income is only sufficient for one." Newlywed—"Well, if she really loved you she would probably be satisfied with that."—Puck.

"Don't you miss you husband very much now that he is away." "Oh, no! At breakfast I just stand his newspaper up in front of a plate and half the time I really forget he isn't there."—Exchange.

"That is your husband rapping!" announced the medium in a solemn voice. "My husband rapping?" said the widow, absently; "gracious! he must have forgotten his night-key!"—Philadelphia Record.

In His Favor, She—Papa says that a young man who smokes cigarettes will never set the world on fire. He—Well, that's the first good thing I ever heard any one say of a cigarette smoker.—Yonkers Statesman.

Dr. Brown—"Well did you keep the thermometer in the room at 70 degrees, as I told you?" Mrs. Murphy—"I did, indeed, doctor, but I had a hard time to do it. The only place it would stay at sixty was forst the chimney-piece."—Life.

Poet—I was pleased to see my poem in your paper. Is there any money—Editor—Oh, no; we shan't charge you anything this time. It is your first offense, you know. If, however, it is repeated, we can not let you off again so easily.—Boston Transcript.

Young Wife—"I received to-day a beautiful diploma from the cooking school—on parchment—and I've celebrated by making you this dish. Now, just guess what it is." Young Husband (chewing on his burnt omelet)—"The diploma?"—Fleegende Blatter.

Manoeuvres. Lieutenant Nobs (just arrived)—How long will you take to drive me to the fort, cabby? Cabby—Ten minutes, captin, by the short cut through the alleys. But the military allus goes the long way round, through the fashionable part of the town, yer honor, which takes an hour. (Cabby gets his hour.)—Punch.

"Gordin' t' th' statoots," began Judge Wayback, as he stood up, "I'll hev t' giv' yer ten years t' th' penitentierry." "But," exclaimed the lawyer for the defendant, jumping to his feet, "there are extenuating circumstances." "They is?" cried the judge in alarm. "Ef I thought thet, durned if I wouldn't giv' him fifteen years."—Columbus Journal.

"There, my dear," said the returned hunter, "there's one bird for you, anyway. Bagged him just as I was about to give up in disgust." "Oh, George!" she exclaimed, "it's a carrier-pigeon, isn't it?" "Not much! It's a quail." "But it has a card tied to its leg, with some message on it. Let's see, it says: 'John Jones, Poultry and Game, Central Market.'"—Philadelphia Press.

The doctor examined his patient carefully, and, with a grave face, told him that he was very ill, and asked if he had consulted any one else. "Oh," said the man, "I went to see a druggist and asked his advice, and he—" "Druggist!" the doctor broke in, angrily; "what was the good of that? The best thing you can do when a druggist gives you a bit of advice is to do exactly the opposite." "And he," the patient continued, "advised me to come to you."—EX.